

**Supplemental Specification  
2005 Standard Specification Book**

**SECTION 01282**

**PAYMENT**

**Delete Section 01282 in its entirety and replace with the following:**

**PART 1      GENERAL**

**1.1      RELATED SECTIONS**

- A.      Section 00555: Prosecution and Progress
- B.      Section 00570: Definitions
- C.      Section 00725: Scope of Work
- D.      Section 00727: Control of Work
- E.      Section 01284: Prompt Payment (For Federal Aid Projects)

**1.2      REFERENCES**

- A.      *Rental Rate Blue Book for Construction Equipment*
- B.      Wall Street Journal

**1.3      SCOPE OF PAYMENT**

- A.      The Department fully compensates the Contractor as provided in the contract for:
  - 1.      Furnishing all materials, labor, equipment, tools, transportation, and incidentals required for acceptable completion of the work.
- B.      Lump sum or each:
  - 1.      Consider payment as full compensation for all resources and incidentals necessary to complete the work.
- C.      The Department will not pay the Contractor for:
  - 1.      Work that is in excess of that contained in the contract.
  - 2.      Removal and replacement of defective work.
  - 3.      Loss of anticipated profits.

- D. Partial payment or releasing of retainage does not relieve the Contractor of the obligation to correct all defective work or materials.

#### **1.4 ELIMINATED ITEMS**

- A. Accept the Engineer's authority to eliminate contract items found to be unnecessary to complete the work.
- B. Request reimbursement for all costs incurred before notification of elimination.

#### **1.5 VARIATION IN QUANTITIES AND SIGNIFICANT CHANGES IN CHARACTER OF WORK**

- A. When the accepted quantities of work vary from the estimated quantities in the contract, the Department either pays the original contract unit prices for the accepted quantities of work or provides adjustment in accordance with Section 00725.
  - 1. The Department does not allow compensation for any increased expenses, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor resulting either directly from such alterations or indirectly from unbalanced allocation among the contract items of overhead expense and subsequent loss of expected reimbursement or from any other cause.

#### **1.6 DIFFERING SITE CONDITIONS, CHANGES, AND EXTRA WORK**

- A. The Department pays for differing site conditions, changes, and extra work at either unit price or lump sum as stipulated in the order authorizing the work.
- B. The Engineer uses contract unit prices if they are representative of the work to be performed.
  - 1. Unit price work will be reimbursed at the rates established in the contract.
    - a. These rates include compensation for the actual work and associated field indirect costs, home office overheads, profit, and all other costs incidental to the work unless otherwise defined in the contract.
- C. Negotiated lump sum or unit pricing for changes to the contract work will be based on the Contractor's estimate to do the work as validated by the Engineer's review or independent cost estimate.
  - 1. Support the price with a detailed cost estimate. Include the following in the estimate:
    - a. Labor and equipment hours based on agreed upon productivity rates.

- b. Use the actual cost of wages, benefits, burdens, and other labor related expenses for the labor rates applied to the estimated man-hours.
    - 1) Include certified accounting records verifying these costs or make them available upon request of the Engineer.
  - c. Materials will be reimbursed at actual cost as determined by supplier invoices or estimates.
    - 1) Materials produced on site, such as granular borrow or UTBC will be reimbursed according to the labor and equipment rates used to produce such materials.
  - d. Use the actual cost of the equipment to the Contractor for equipment rates applied to the estimated equipment hours.
    - 1) Include certified accounting records verifying these costs or make them available upon request of the Engineer.
- 2. A markup of 15 percent will be paid on all expenses identified above. This markup compensates the Contractor for home office overheads, profit, and incidental costs.
- 3. No other expenses will be compensated unless approved by the Engineer.

## 1.7 COMPENSATION FOR EXCUSABLE DELAYS

- A. Document all costs claimed that result directly from a delay caused by the Department. Refer to Section 00555.
  - 1. Use actual records kept in the usual course of business and measure increased ownership expenses according to generally accepted accounting principles.
    - a. Do not use equipment rental rate guides.
  - 2. The Department does not compensate for the following:
    - a. Profit more than provided in accordance with this section
    - b. Loss of profit
    - c. Labor inefficiencies
    - d. Home office overhead exceeding that provided
    - e. Consequential damages, including, but not limited to, loss of bonding capacity, loss of bidding opportunities, and insolvency
    - f. Any indirect costs or expenses
    - g. Attorney's fees, claims preparation expenses, or litigation costs
- B. Compensable costs will be determined as follows:
  - 1. **Direct Costs:** Actual costs of the Contractor's workforce and equipment idled by the delayed activity.
    - a. Provide an accountant's certification of all costs.
  - 2. **Field Indirect Costs:** Actual costs for job-site supervision and field office operating costs, or other costs not directly associated with a particular work activity, for the period of delay.
    - a. Provide an accountant's certification of all costs.

3. **Home Office Overhead:** Unabsorbed home office costs that would have been paid for by the project billings if the work had not been delayed. To be entitled to home office overhead costs, demonstrate the delay-causing event resulted in financial harm.
- No unabsorbed home office overheads will be reimbursed for the first five calendar days of the delay-causing event.
  - Calculate home office overhead cost from the sixth calendar day of the delay-causing event through its end if the project is between 0 and 95 percent complete.
  - Use the following formula to calculate home office overhead costs:

$$E = D [0.05(A)/C]$$

Where:

0.05 = Allowed markup for home office overhead

A = Current contract value

C = Total contract duration in calendar days, including approved time extensions

D = Number of calendar days the critical path of the schedule is delayed due to the delay-causing event minus five.

E = Total reimbursable amount for unabsorbed home office overhead

- No home office overheads will be reimbursed if the delay occurs after the project is 95 percent complete.
- C. The total reimbursable cost for a compensable delay is the sum of the daily agreed to costs for direct costs, field indirect costs, and unabsorbed home office overhead costs as computed in accordance with this article for the duration of the delay. No other costs, including profit, will be reimbursed.

## 1.8 FORCE ACCOUNT

- A. When the Contractor and Engineer are unable to negotiate an agreed upon price for changed or added work, the Engineer may require the Contractor to do such work on a force account basis.
- Costs reimbursed in accordance with this section are considered full and complete compensation for:
    - All field indirect costs, including project management and supervision, field office operating costs, and all field office staff, except for time spent in immediate and direct supervision of the force account work.
    - All home office overhead costs and other indirect costs incurred as a result of the force account work.

2. The Department does not compensate for small tools (costing \$200 or less) or any other costs for which no specific allowance is provided in this section.
- B. Compensation for labor:
1. The Department pays straight time for all hours worked. Overtime must have the prior written approval of the Engineer.
  2. The Department pays for all labor, including direct supervision used in the actual and direct performance of the work at the wage or scale agreed upon in writing before beginning work.
  3. The Department reimburses for actual costs paid to or in behalf of workers, including health and welfare required by collective bargaining agreements or other employment contract generally applicable to the classes of labor employed on the work.
  4. In addition to the above costs, the Department pays to Contractor an amount equal to 60 percent of the sum of the above items to cover the costs of bonds, insurance, taxes, and all other indirect costs, etc.
    - a. Submit wage, payroll, and cost records pertaining to work paid for on a force account basis to the Engineer. This information is open to inspection or audit.
  5. The Department reimburses for actual costs for subsistence and travel allowance.
- C. Compensation for materials:
1. The Department pays for all materials accepted by the Engineer and incorporated in the project at actual cost, including sales taxes and transportation charges plus 15 percent.
    - a. Materials such as saw blades, drill bits, etc., expended in the course of performing the work, excluding equipment, are considered incorporated in the project.
    - b. Include invoices with statements for all materials used. Certify by affidavit the cost of material furnished from Contractor's stocks when no invoice is available.
- D. Compensation for equipment:
1. The Department does not pay for pickup trucks used solely for transportation.
  2. The Department pays for machinery or special equipment, excluding small tools, authorized by the Engineer at an hourly rate obtained from the *Rental Rate Blue Book for Construction Equipment*. These hourly rental rates are determined by the monthly rental rate taken from the above-mentioned publication divided by 176. The total hourly rates have been computed from equipment costs currently in effect and do not include costs for operating personnel.

Obtain this publication through:

Equipment Watch

1735 Technology Drive, Suite 410

San Jose, CA 95110-1313

Phone: (800) 669-3282

Fax: (800) 224-3527

Refer to <http://www.udot.utah.gov/index.php/m=c/tid=719>.

The rates require adjustment by a Regional Factor and a Depreciation Factor with operating and standby rates established as follows:

- a. Operating Rate - For those hours the equipment is actually in use.
  - 1) Includes ownership and operating costs adjusted for Depreciation and Region factors.
- b. Standby Rate - Compensation for equipment required to be at the work site but not operating. This rate is 50 percent of the adjusted ownership and operating costs computed above.
  - 1) The duration of allowable standby time is to be approved in writing by the Engineer with a maximum of eight hours per day or 40 hours in a week.
3. When the "Manufacturer's Rated Capacity" falls between those shown in the "*Rental Rate Blue Book for Construction Equipment*" the Department uses the shown capacity that is closest to the manufacturer's.
4. Agree upon all rates in writing before beginning work.
5. Obtain approval from the Engineer for any equipment rental rates not provided before the start of any force account work.
6. The Department allows "move-in" and "move-out" transportation cost for a piece of equipment not available on the job, if the particular piece of equipment is not moved onto the job under its own power.
  - a. The Department allows hourly operating rate for equipment moved to the site under its own power.
  - b. The Department pays these charges only once for any particular piece of equipment except in unusual circumstances that must be justified in writing and agreed to by the Engineer.
7. When the equipment used is specialized and not available in the Contractor's inventory and is rented or leased from an outside source, the Department adds a 10 percent allowance on the first \$5,000 plus five percent of the balance in excess of \$5,000 for overhead for all rented or leased equipment paid for by invoices.
  - a. Where the rental rate charged exceeds the rate determined by the *Rental Rate Blue Book for Construction Equipment*, submit the rental or lease agreement to the Engineer for approval.
  - b. The Department pays equipment-operating costs at the rate from the *Rental Rate Blue Book for Construction Equipment* for rented or leased equipment for each hour the equipment was actually used.

8. When the required equipment is in the Contractor's available inventory but not on the project site, the equipment may be rented from a local source. The Engineer may approve rental rates for equipment obtained from local sources when such rates are within 10 percent of the *Rental Rate Blue Book for Construction Equipment*. When the equipment is to be used less than a week, "move-in" and "move-out" costs for Contractor owned equipment may be considered when comparing rental costs of equipment obtained from local sources.
  - a. This option is only allowed when the cost of locally rented equipment is less than using Contractor owned equipment including "move-in" and "move-out" charges.
  - b. Such rentals must be supported by a cost analysis indicating the method used was the least expensive.
  - c. The Department reimburses for such equipment based on the *Rental Rate Blue Book for Construction Equipment* if the Contractor elects to rent equipment of a type that is in the Contractor's inventory and the rental costs exceed that allowed by this article.
- E. Subcontracts:
  1. For all force account work performed under an approved subcontract, the Department pays an additional allowance equal to six percent for overhead for the subcontract.
  2. The Engineer reviews each situation to determine that performing the work by subcontract is justified.
- F. Compare cost records daily with the Engineer.
- G. At the Engineer's request, provide an itemized statement of the cost of the force account work detailed as follows:
  1. Name, classification, date, daily hours designating straight time and overtime, total hours, rate, and extension for each laborer and supervisor. Payrolls may be used for some of this information.
  2. Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
  3. Quantities of materials, prices, and extensions.
  4. Transportation of materials and equipment.
  5. Cost of fringe benefits and subsistence.
  6. Subcontractors.

## **1.9 PROGRESS PAYMENTS**

- A. The Department makes progress payments at least once each month as the work is progressing.

- B. More frequent payments may be made during any period when the Department determines that the value of work performed during the period is sufficient to warrant a payment.
- C. Payments are based on estimates prepared by the Engineer of the value of the work performed and materials in place under the contract and for payment for material on hand in accordance with this section.
- D. The Department does not make any progress payment when the total value of the work done since the last estimate is less than \$1,000.
- E. From the total value of work, the Department deducts and retains five percent until after the entire contract has been completed in an acceptable manner, with the following exceptions:
  - a. On Federal-aid contracts, retention for subcontracted work is paid upon satisfactory completion and acceptance by the Department. Refer to Section 01284 for Federal-aid contracts.
  - b. When no less than 95 percent of the work has been completed, the Engineer may prepare a semi-final estimate with the consent of the Surety from which the Department retains 1.5 percent of the original contract amount. The Department certifies the remainder for payment, less all previous payments.
- F. The Contractor may enter into an addendum agreement providing for payment of retained money into an escrow account, or the Department does so automatically.
  - 1. This money is applied to the purchase of approved securities that are to be held by an escrow agent until satisfactory completion of the construction contract.
  - 2. The value of the securities placed in escrow has a minimum value equal to or greater than the amount that would otherwise be retained.
  - 3. The addendum agreement must be executed concurrently with the execution of the construction contract. Agreement forms are available in the office of the Department's Director for Construction and Materials.
- G. The Department pays the Contractor within 14 calendar days after certification and approval of billings and estimates.
  - 1. Contractor and Engineer agree to a Saturday partial estimate closing date. Succeeding partial estimates close on the same Saturday for each succeeding month.
  - 2. Contractor approves partial estimate before submission.



## **1.10 PAYMENT FOR MATERIAL ON HAND**

- A. When the Contractor presents delivery copies of invoices, the Department may include in the partial payment invoice, advance payments for acceptable nonperishable materials purchased expressly for incorporation in the work when delivered in the vicinity of the project or stored in approved storage place.
  - 1. The Engineer determines the amount to be included in the estimate, but in no case will the amount exceed the value of the materials as shown on the delivery invoice or 75 percent of the in-place price, whichever is less.
  - 2. When the approved storage location is other than the project site, furnish evidence that the stockpiled materials are irrevocably obligated to the project.
  - 3. The Department does not pay when the invoice value of such materials, as determined by the Engineer, amounts to less than \$2,000 or if materials are to be stored less than 30 calendar days, unless otherwise specified.
  - 4. Within 60 calendar days following the date of the estimate invoice on which the stockpile material is to be paid by the Department, furnish to the Engineer certified paid invoices or a certified statement with a copy of the check showing payment.
  - 5. Material will be removed from the next partial estimate as stockpiled materials if proper invoices showing payment to the supplier is not received.
- B. The Department does not make any partial payment on living or perishable materials until incorporated as specified in the contract.
- C. The Department does not pay for materials brought onto the site at the Contractor's election that may be incorporated into the project such as fuels, supplies, metal decking forms, ties, or supplies used to improve efficiency of operations.
- D. Approval of partial payment for stockpiled materials does not constitute final acceptance of such materials for use in completing items of work.
- E. The Department purchases at actual cost and without any percentage allowance for profit, materials delivered to the project in compliance with the contract or left unused due to changes in plans or variation in quantities, if the materials are not practicably returnable for credit.
  - 1. Purchased materials become the property of the Department.
  - 2. Actual costs are based on invoice price plus transportation costs.
- F. Payment is limited to contract quantities unless ordered by the Engineer. Assume responsibility for excess materials delivered to the project or aggregate produced beyond the contract amount without authority from the Engineer.

- G. At the option of the Department, surplus aggregates up to the contract quantities may be purchased provided the material is stockpiled where directed and meets specification requirements when stockpiled.
  - 1. The Department pays for material accepted on an agreed price basis, which price is normally the Contractor's production cost.
  - 2. The Department pays a negotiated price for transporting and stockpiling materials at the directed location.

## **1.11 FINAL PAYMENT**

- A. When the project has been accepted in accordance with Section 00727, the Engineer prepares the final estimate of work performed.
  - 1. The Department processes the estimate for final payment if the Contractor approves the final estimate and does not object to the quantities within 30 calendar days of receiving the final estimate.
  - 2. The Department pays the entire sum due after deducting all previous payments and all amounts to be retained or deducted under the provisions of the contract after approval of the final estimate by the Contractor.
- B. File with the Department a full, complete, and itemized written statement justifying the adjustment within 30 calendar days after the final estimate is submitted for approval if additional payment is due from the Department.
  - 1. Contractor waives all disputes not itemized.
  - 2. Submission of disputes by the Contractor will not be reason for withholding full payment of the total value of work shown on the Engineer's final estimate.
  - 3. The Department evaluates the dispute.
    - a. The final estimate is revised accordingly under the terms of the contract if it is determined that additional payment is due.
    - b. The estimate as submitted is final if it is determined that no additional payment is due.
- C. All prior partial estimates and payments are subject to correction in the final estimate and payment.
- D. The Department completes and delivers the final estimate to the Contractor within 90 days of contract completion.

## **1.12 FUEL COST ADJUSTMENT**

- A. Fuel cost adjustment is intended to limit the risk to the Contractor from potentially unstable fuel prices that might occur during the contract.
  - 1. This provision is not intended to estimate actual quantities of fuel used in construction operations or compensate for actual price variations experienced by the Contractor.

2. The Department determines adjustments under the provisions of this section and presumes the Contractor has relied on these provisions when determining unit bid prices.
3. The Contractor may invoke this provision at any time during the contract by written notification to the Engineer.
  - a. Adjustments are then made on all prior and future partial estimates.
  - b. When this provision becomes effective, it remains in effect for the duration of the contract.

B. Abbreviations and Terms:

1. Estimate Price for fuel (EPf): The fuel price established for the partial estimate period.
  - a. On the first Monday of each month the Department determines the EPf using the spot price per barrel for West Texas Intermediate (WTI) crude oil posted in the commodities and futures section of the Wall Street Journal. This spot price is averaged with spot prices posted for the previous three Mondays to establish the EPf.
  - b. The EPf remains in effect until the first Monday of the following month and is used for regular partial estimates closed before the first Monday of the following month.
2. Base Price for fuel (BPf): The contract base fuel price, equal to the EPf in effect on the date of the contract bid opening.
3. Fuel Factor (FF): A combined diesel and gasoline usage factor established for purposes of calculating the Fuel Cost Adjustment.
  - a. Table 1 shows the items of work eligible for adjustment.
4. Fuel Cost Adjustment (FCA): The fuel cost adjustment in dollars determined in accordance with this article.

C. Determining FCA:

1. FCA only applies to acceptable work performed on major contract items, as defined in Section 00570, and eligible items in Table 1 with an individual value of more than \$100,000, or as otherwise specified in Table 1, based on original contract quantities.
2. FCA does not apply to work added by change order.
3. FCA may be positive or negative depending on the changes or differences between the BPf and the EPf.
4. For work performed after the expiration of contract time and approved time extensions, the EPf will be limited to the lesser of:
  - a. The EPf for the estimate period when the work was performed.
  - b. The EPf for the last partial estimate period before the expiration of the contract time.

D. FCA formula:

When the EPf is more than 15 percent above the BPf:

$$FCA = \frac{[(EPf - BPf) - 0.05 BPf] Q (FF)}{42}$$

When the EPf is more than 15 percent below the BPf:

$$FCA = \frac{[(EPf - BPf) + 0.05 BPf] Q (FF)}{42}$$

Where:

Q = Quantity of acceptable work performed

FF = Fuel factor for Q

42 = Conversion of gallons of fuel per barrel of crude

- E. The Department determines the feasibility of proceeding with the remainder of the project and notifies the Contractor in writing if the project is to be terminated if the EPf increases by more than 50 percent from the BPf for an eligible item of work.

**Table 1  
Items Eligible for FCA**

<b>Item of Work</b>	<b>Quantity of Work (Q)</b>	<b>Fuel Factor (FF)</b>
Roadway Excavation, Borrow, Granular Borrow, Top Soil	Cubic Yard Ton	0.45 0.25
Underdrain Granular Backfill	Cubic Yard	1.16
Untreated Base Course	Ton Cubic Yard	0.84 1.63
Hot Mix Asphalt	Ton Cubic Yard	3.60 7.00
Open Graded Surface Course	Ton Cubic Yard	3.60 6.80
Stone Matrix Asphalt (SMA)	Ton Cubic Yard	3.60 6.80
Rotomilling Profile Rotomilling In-Place Cold Recycled Asphaltic Base Recycled Surface	Sq Yd-In Sq Yd Sq Yd Sq Yd	0.03
Chip Seal Coat	Square Yard	0.03
Portland Cement Concrete Pavement Lean Concrete Base Course	Sq Yd-In Sq Yd-In	0.214 0.048
Riprap	Cubic Yard	0.57
Bridges exceeding \$500,000 (Includes the following items: Structural Concrete, Piles, Reinforcing Steel, Prestressed Concrete Members, and Structural Steel) 36 inch and larger pipe culvert – combined items exceeding \$200,000	\$	0.038

### **1.13 ASPHALT COST ADJUSTMENT**

- A. Asphalt cost adjustment is intended to limit the risk to the Contractor from potentially unstable asphalt prices that might occur during the contract.
1. This provision is not intended to estimate actual quantities of asphalt used or compensate for actual price variations experienced by the Contractor.
  2. The Department determines adjustments under the provisions of this article and presumes that the Contractor has relied on these provisions for adjustments when determining unit bid prices.

3. The Contractor may invoke this provision at any time during the contract by written notification to the Engineer.
  - a. Adjustments are then made on all future partial estimates.
  - b. When this provision becomes effective, it remains in effect for the duration of the contract.
- B. The Department adjusts the price of asphalt materials for acceptable work performed on bid items that contain asphalt materials.
- C. Abbreviations and Terms:
  1. Estimate Price for asphalt (EPa): The asphalt price established for the partial estimate period.
    - a. On the first Monday of each month the Department determines the EPa using the spot price per barrel for West Texas Sour (WTS) crude oil posted in the commodities and futures section of the Wall Street Journal. This spot price is averaged with spot prices posted for the previous three Mondays to establish the EPa.
    - b. The EPa remains in effect until the first Monday of the following month and is used for regular partial estimates closed before the first Monday of the following month.
  2. Base Price for asphalt (BP<sub>a</sub>): The contract base asphalt price, equal to the EPa in effect on the date of the contract bid opening.
  3. Asphalt Cost Adjustment (ACA): The asphalt cost adjustment in dollars determined in accordance with this article.
- D. Determining ACA:
  1. ACA does not apply to any work performed within 120 calendar days of the contract bid opening date.
  2. ACA does not apply to work added by change order.
  3. ACA may be positive or negative depending on the changes or differences between the BP<sub>a</sub> and the EPa.
  4. For work performed after the expiration of contract time and approved time extensions, the EPa will be limited to the lesser of:
    - a. The EPa for the estimate period when the work was performed.
    - b. The EPa for the last partial estimate period before the expiration of the contract time.

E. ACA Formula:

When the EPa is more than 15 percent above the BPa:

$$ACA = [(EPa - BPa) - 0.05 BPa] (5.6) T$$

When the EPa is more than 15 percent below the BPa:

$$ACA = [(EPa - BPa) + 0.05 BPa] (5.6) T$$

Where:

T = Tons of asphalt used

5.6 = Conversion of barrels of crude oil per ton of asphalt

The Engineer determines T as follows:

1. For PG asphalt binders
  - a. Use the target percentage of asphalt binder in the approved mix design for the quantity of accepted material for:
    - 1) Hot Mix Asphalt (HMA)
    - 2) Stone Matrix Asphalt (SMA)
  - b. Use the quantity of accepted asphalt binder for:
    - 1) Open-Graded Surface Course (OGSC)
2. For Emulsified Asphalts, use the residual asphalt calculated from the quantity of accepted material.
3. For Cutback Asphalts, use the quantity of accepted material.

- F. The Department determines the feasibility of proceeding with the remainder of the project and notifies the Contractor in writing if the project is to be terminated if the EPa increases by more than 50 percent from the BPa for an eligible item of work.

**PART 2      PRODUCTS      Not used**

**PART 3      EXECUTION      Not used**

END OF SECTION